Application No. 10/006,461 Amendment dated December 30, 2003 Reply to Office Action of October 3, 2003

## **REMARKS**

Claims 1-10 were rejected under 35 U.S.C. 103(a) given Shigematsu (EP 1018695 A2) ("Shigematsu"). Claims 11-17 were rejected under 35 U.S.C. 103(a) given Shigematsu in view of Newton et al. (U.S. Patent No. 6,376,393) ("Newton"). Claims 18-51 were rejected "for the same reasons as set forth in the rejections of claims 1-17." These rejections are respectfully traversed and reconsideration is respectfully requested.

The rejection of all of the claims relies primarily upon the Shigematsu reference. Shigematsu, however, teaches a distinctly different construction of a finger print recognition apparatus. In particular, Shigematsu teaches that a sensor element (which actually contacts the skin surface of a finger) couples to a sensor circuit to effect "processing [of] the electrical signal converted by the sensor element 102(a) and outputting predetermined data."

[Column 5, lines 47-49.] Shigematsu also provides a recognition circuit 104 having "a register (holding means) 105 for holding the output from the finger print sensor circuit 102."

[Column 6, lines 47-49.] So configured, Shigematsu does not teach a substantially direct electrical connection between the sensor element and the memory that holds the resultant sensed output. Instead, Shigematsu interposes considerable other processing elements including a sensor circuit and a recognition circuit.

In contrast, the applicant presents and claims a finger print capture device having memory cells that are substantially directly conductively coupled to the conductive paths that comprise a part of the finger print contact surfaces. This significant distinction is now more readily presented in some of the independent claims, such as claim 1, which now reads, in part, "wherein at least some of the conductive paths are substantially directly conductively coupled to at least some of the corresponding electrical devices." Since Shigematsu neither teaches nor suggests such a configuration, and in fact teaches in an opposite direction by interposition of other processing elements, the applicant respectfully submits that these claims are readily distinguished from the Shigematsu teachings.

For certain of these rejections, the Examiner also relied upon a combination of Shigematsu and Newton. Shigematsu's shortcomings have been noted above. Newton describes a process for forming an anisotropic dielectric layer rather than an anisotropic conductive layer. Although Newton refers to a difference in impedance between the z direction as opposed to the x or y direction, it is not clear from that reference what the

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impedance level is. Nevertheless, one can infer from the fact that the dielectric layer is formed on top of an insulating layer on an integrated circuit (with oxide, nitride, carbide, and diamond having been given as examples) that the impedance is so low as to be essentially non-conducting. The material therefore acts as a capacitive element in the equivalent circuit. In the present application, however, the material is a conductive element and has a substantially different role and composition from the Newton material.

For all these reasons, the applicant respectfully submits that a combination of Shigematsu with Newton fails to realize the recitations of the claims in question. There being no objections to or rejections of the claims, the applicant respectfully submits that claims 1-51 may be passed to allowance.

Respectfully submitted,

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